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Title: Spin crossover transition in a Cobalt tautomeric complex

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The Search for a Quantum Spin Liquid: K_2UTe_3

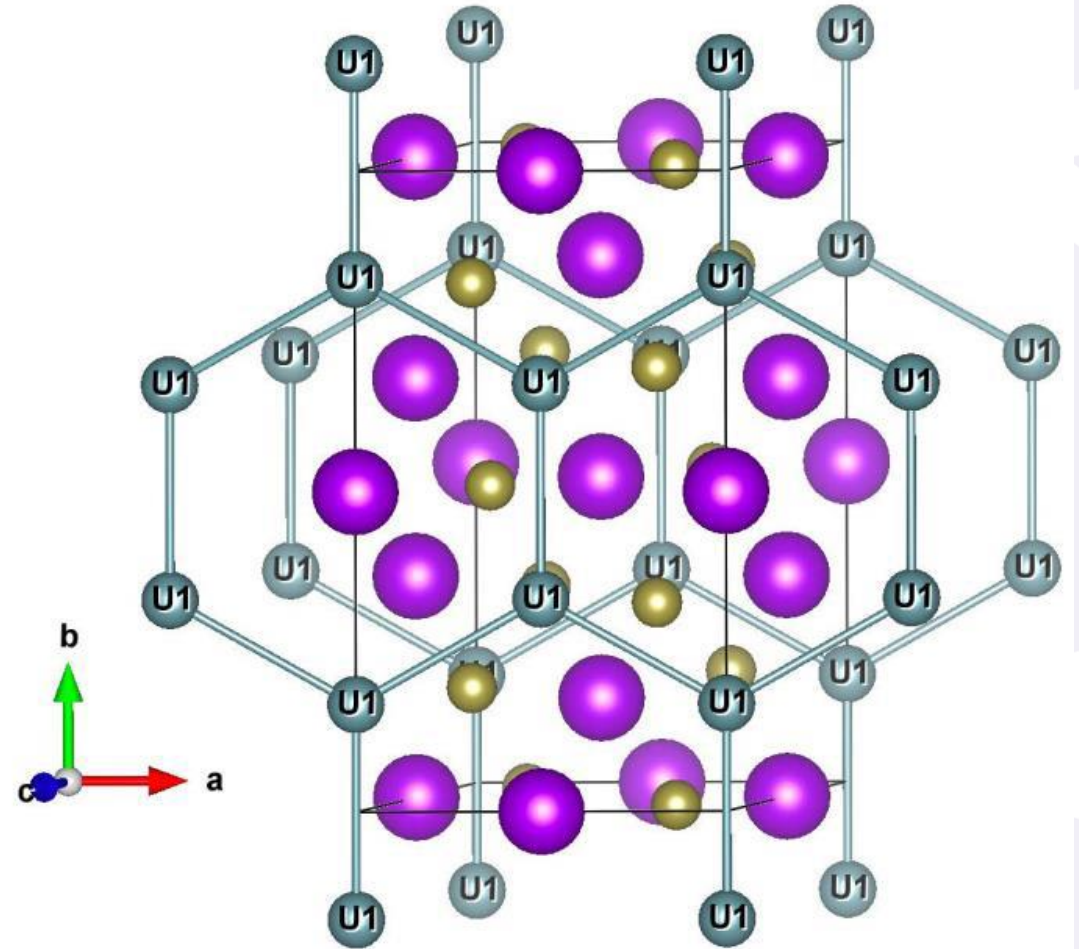
James Wampler

Los Alamos National Laboratory (LANL)

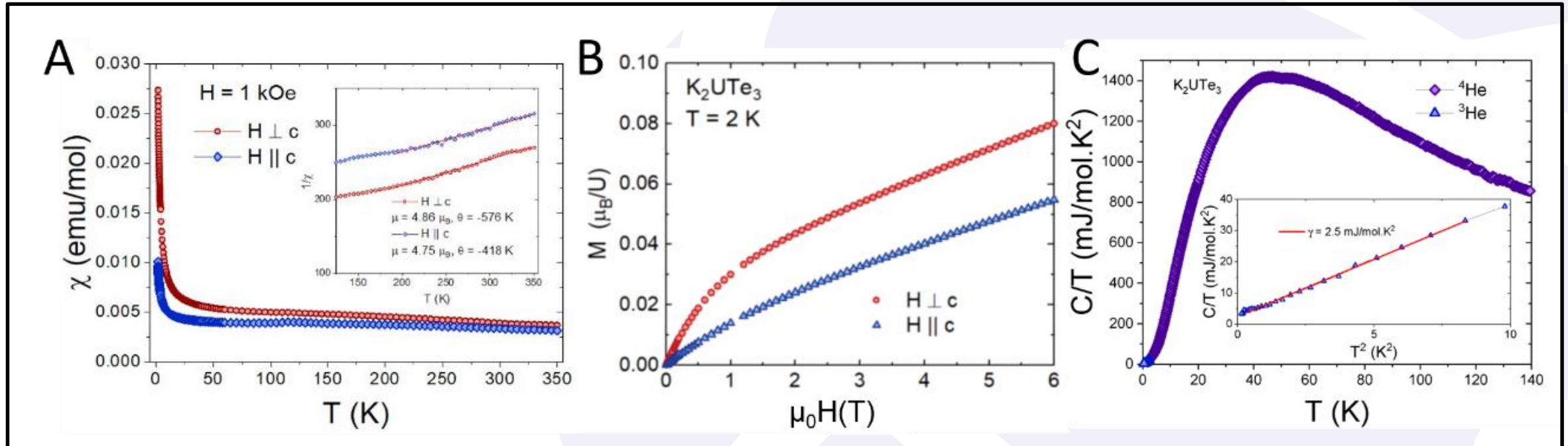


Motivation

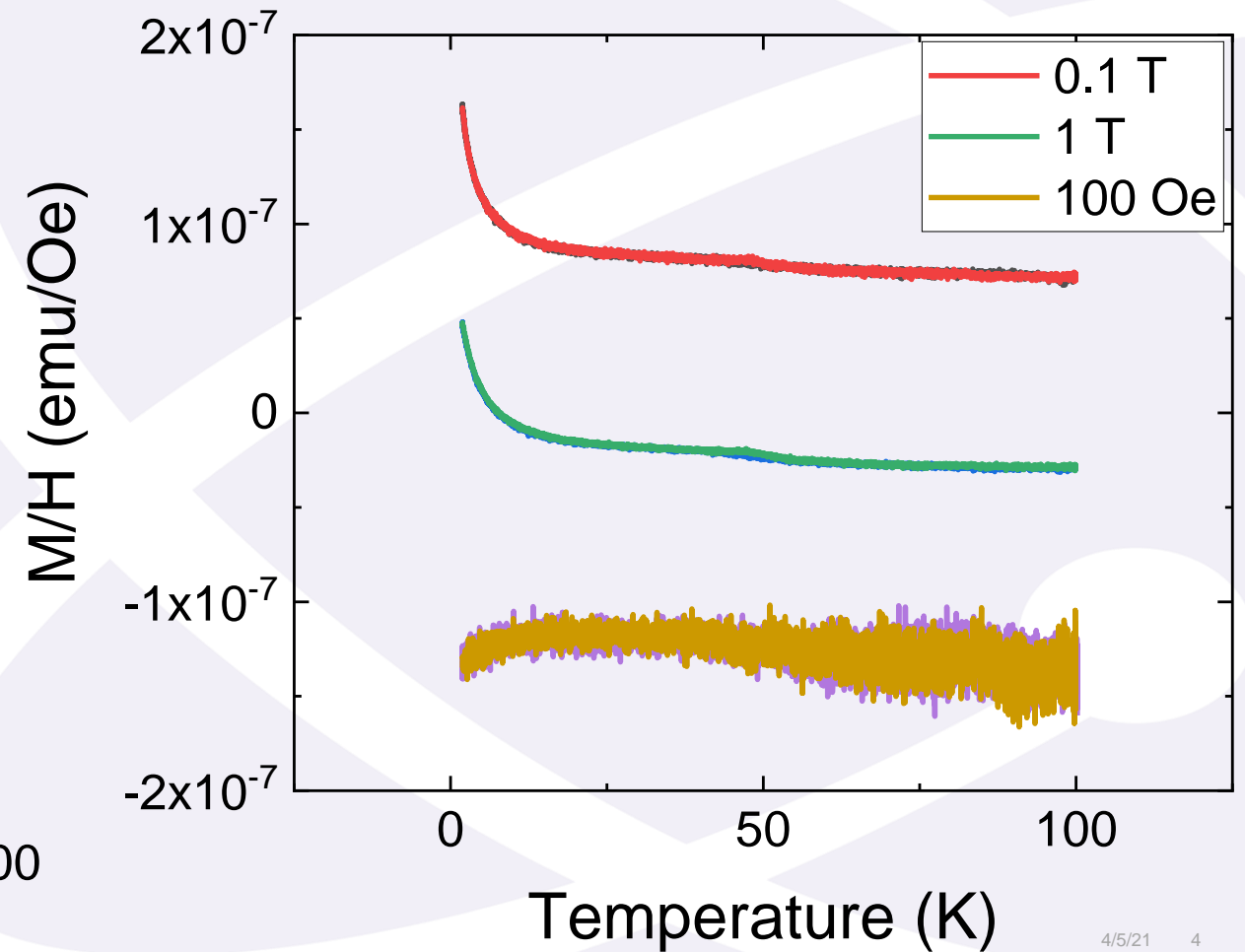
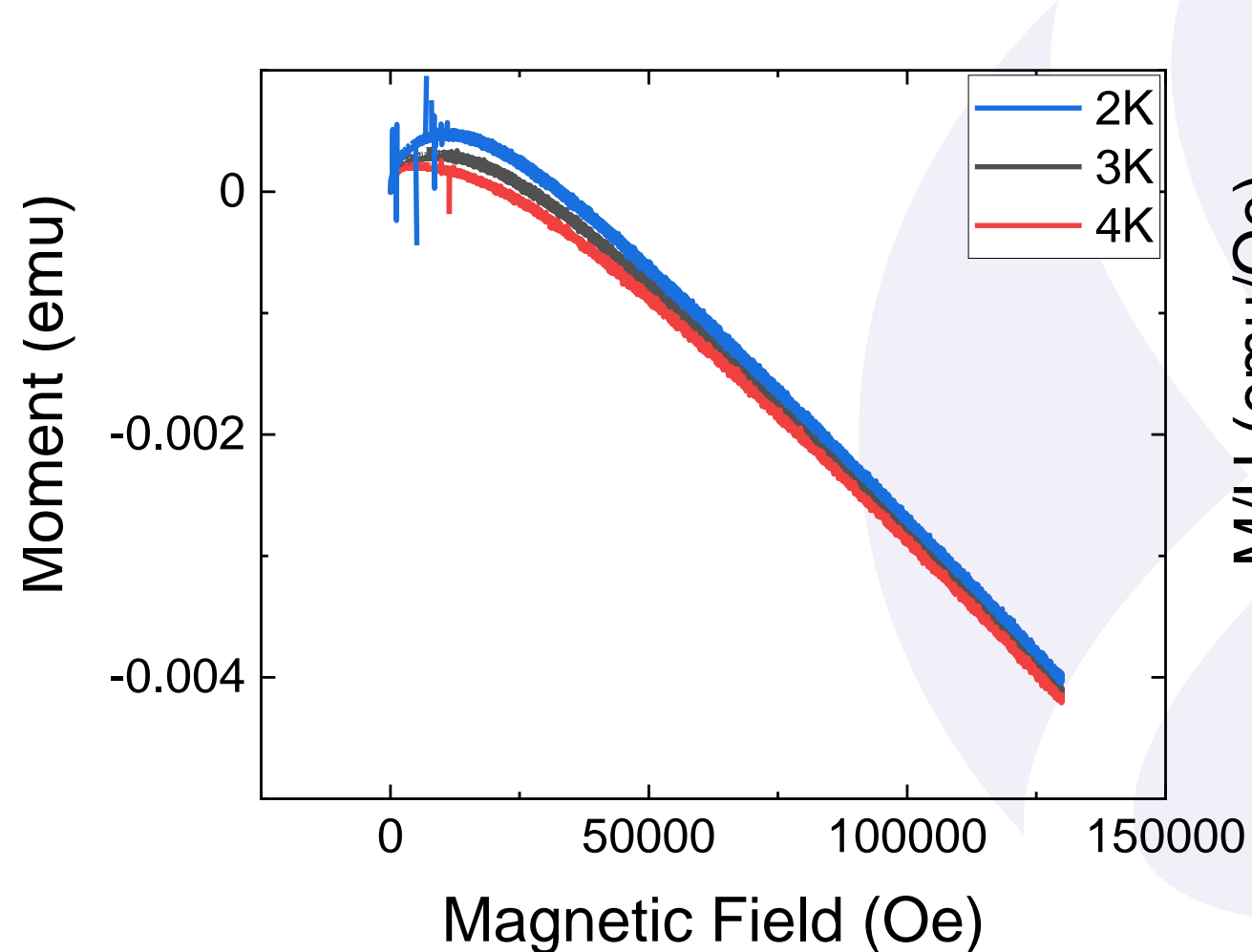
- Honeycomb structure
- No magnetic ordering observed down to 350 mK
- Recent theoretical work indicates $5f$ electron systems promising for QSL
 - Antiferromagnetic Kitaev interactions, in contrast to $4d$, $5d$
- Nascent field



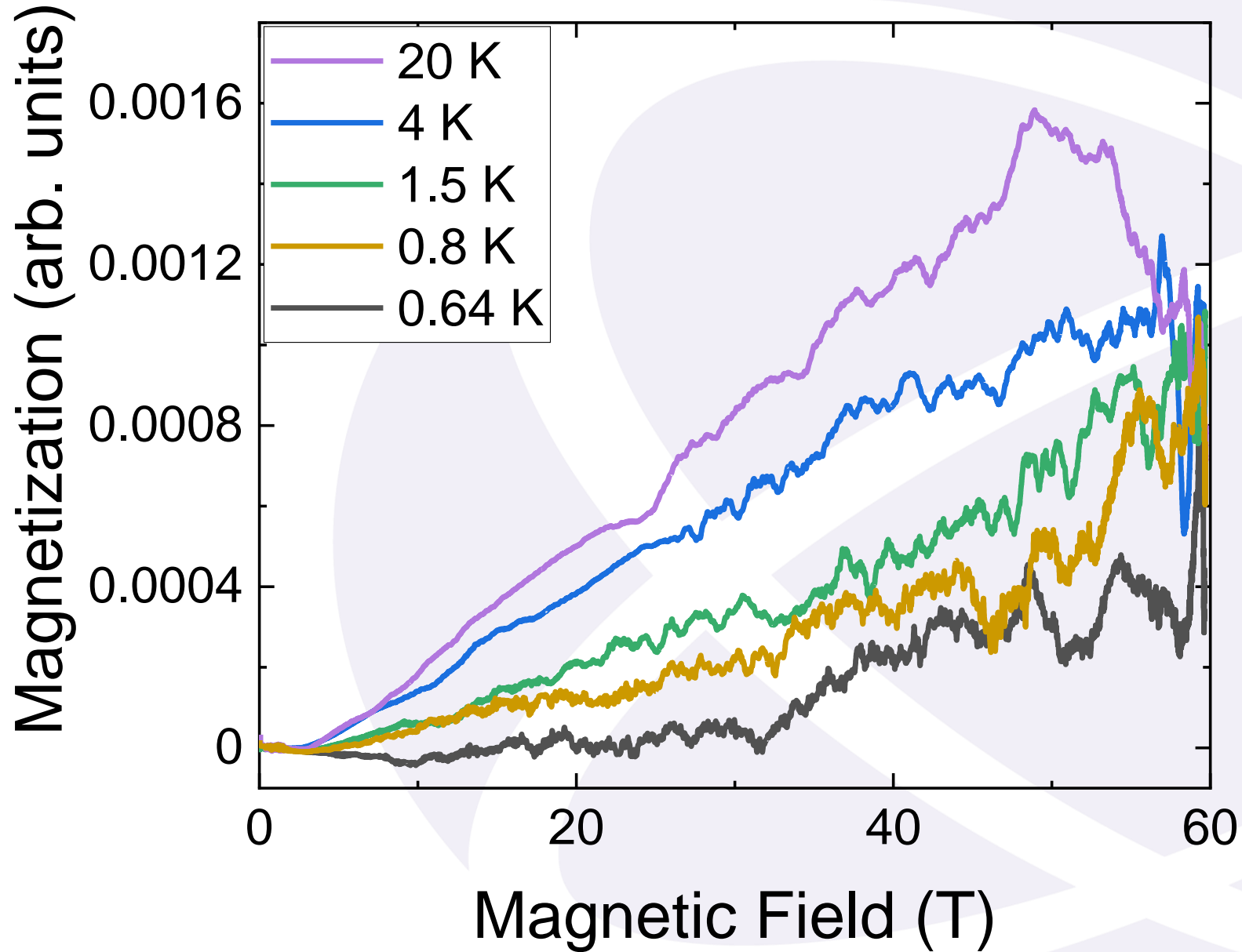
Initial Measurements



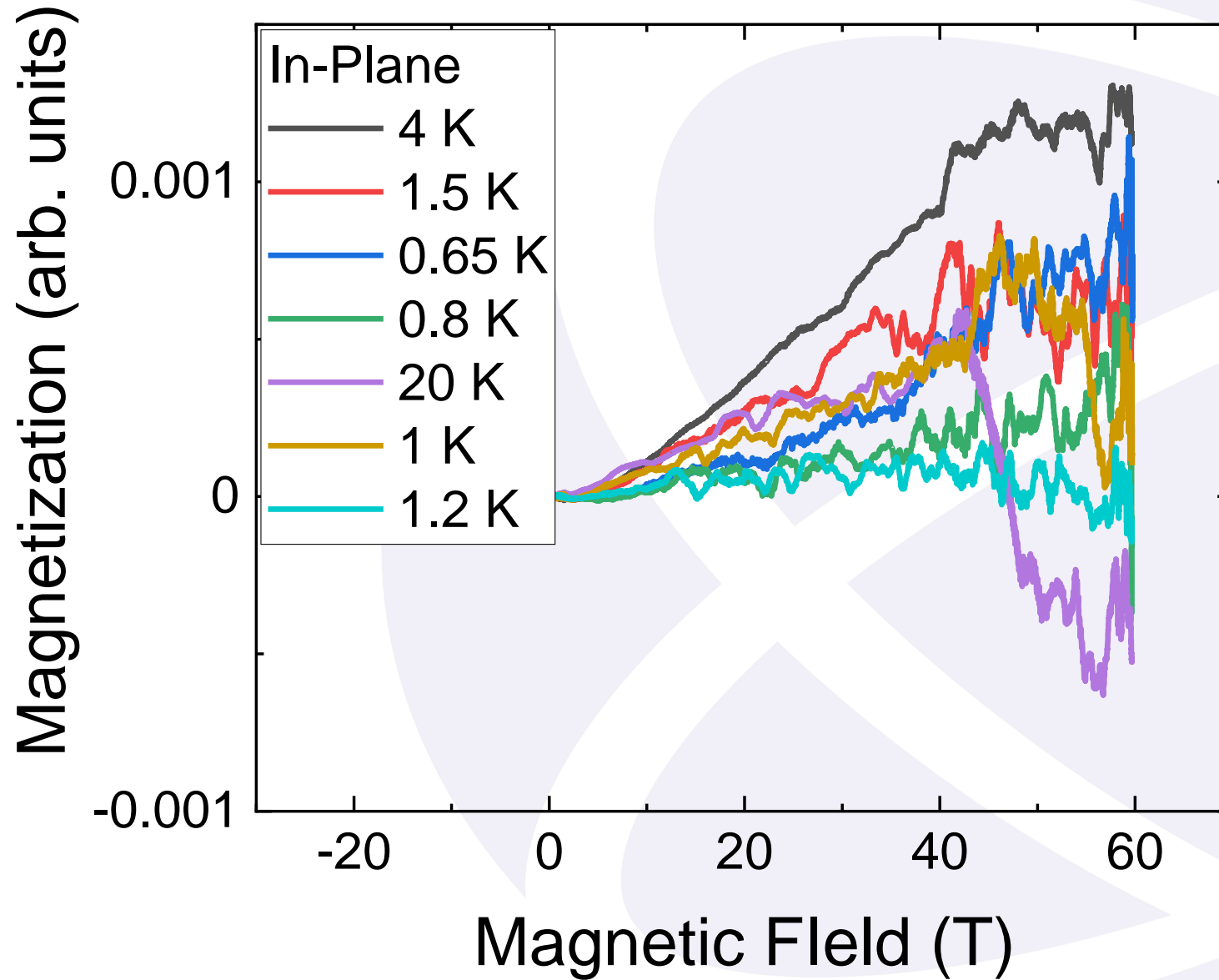
Vibrating Sample Magnetometry



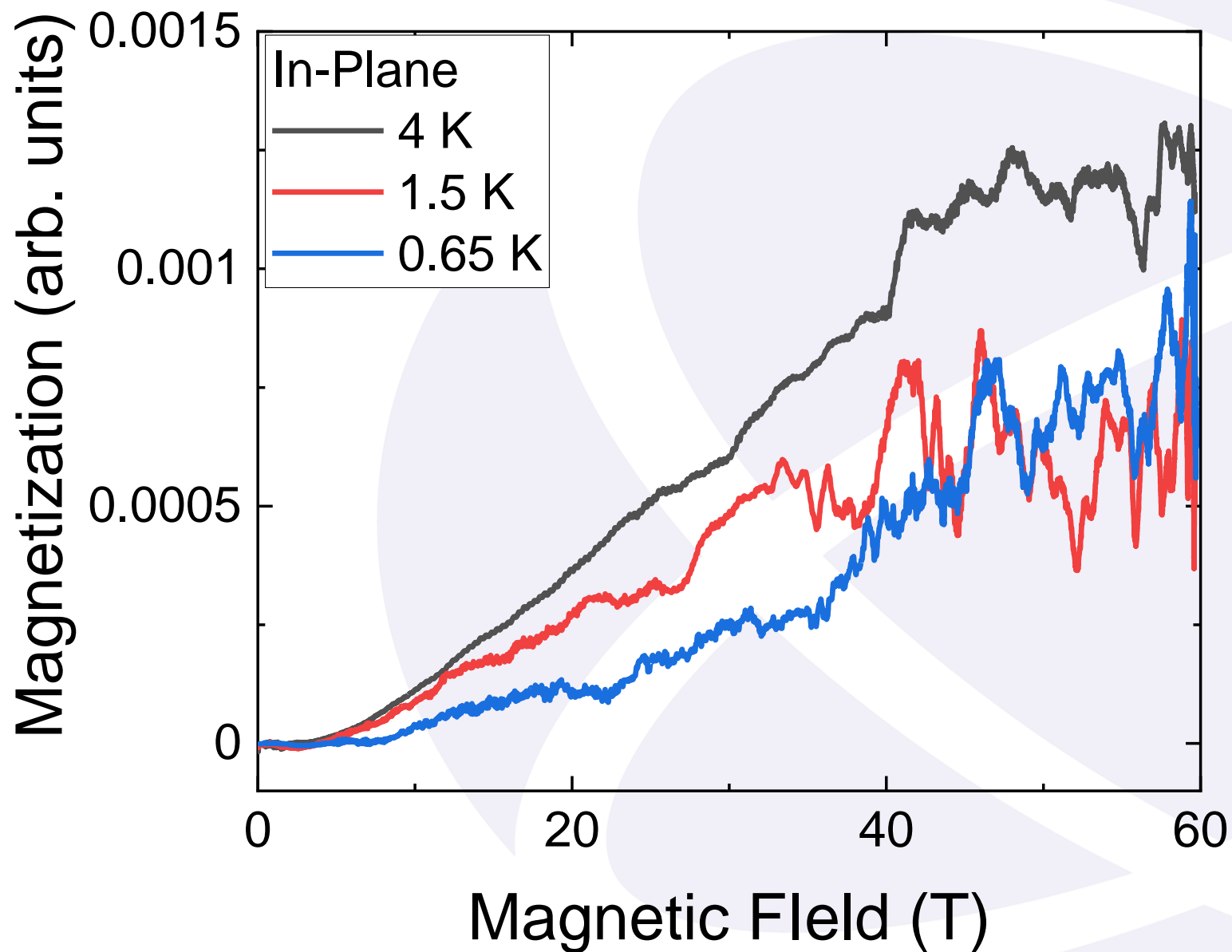
Out of Plane



In Plane



In Plane (first 3 measurements)



Comparing H orientations

